BADCAT ETP

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BAY AREA DEFENSE CONVERSION ACTION TEAM ENVIRONMENTAL TECHNOLOGY PARTNERSHIP

WHAT IS BADCAT?

The Bay Area Defense Conversion Action Team (BADCAT) Environmental Technology Partnership (ETP) was formed to accelerate the environmental cleanup and civilian re-use of closed military bases in the San Francisco Bay Area. Based on needs assessment studies, BADCAT ETP selects vendors to demonstrate innovative technologies, as applied to Department of Defense (DoD) priority contaminants and issues. The vendor fund the demonstrations, and BADCAT ETP serves as a credible, 3rd party to observe the implementation and results of the technology. BADCAT ETP identifies a demonstration site, assists with regulatory permitting, and provides a peer review of work plans, quality assurance plans, and cost and performance reports authored by the vendor.

- Peer reviewed plans, reports, and data
- Exposure to the stakeholder community
- Exposure to Government and private cleanup efforts
- Included in DoD's pool of demonstrated technology

Benefits to the Vendor

WHY BADCAT?

A market analysis of the impacts of the 12 military base closures in the Bay Area indicated a tremendous adverse impact on the local economy. Civilian reuse of this land is highly dependent on cleanup of contamination from past practices. Most traditional characterization and remediation techniques are costly and time consuming, compared to innovative technologies. Often, innovative technologies which promise to be better, faster and cheaper are not readily accepted by the public, environmental regulators, and environmental engineers. BADCAT ETP strives to promote acceptance and implementation of new technologies.

- Address barriers and gaps in environmental technology development and commercialization
- Expedite the cleanup, transfer and economic conversion of former military properties
- Stimulate growth in the region's environmental technologies

Goals of BADCAT ETP

WHO IS BADCAT?

The BADCAT ETP is a public/private partnership of the following diverse organizations:

- Bay Area Economic Forum
- Bay Area Regional Technology Alliance
- California Environmental Protection Agency
- Chevron
- San Francisco State University's Center for Public Environmental Oversight
- U.S. Environmental Protection Agency
- U.S. Navy
- Technology specialists and experts

BADCAT ETP Partners

BADCAT ETP constantly seeks new partners to enhance its multifaceted mission. The California Regional Water Quality Control Board, Department of Energy's Lawrence Livermore National Laboratory, and the local Permit Assistance Centers are in the process of formalizing partner status with BADCAT ETP.

WHEN IS BADCAT?

Originally conceived in 1995, BADCAT ETP updated its business plan and memorandum of understanding in 1999. BADCAT ETP projects are continually in various phases, from solicitation to field demonstration to preparation of the final report.

WHERE IS BADCAT?

Although BADCAT ETP is focused on the environmental and economic issues in the San Francisco region, these problems are not unique to the Bay Area. The technical evaluation reports on emerging technologies are available to interested public and private parties as part of its overall technology transfer objective. In addition, the Bay Area Economic Forum has access to international markets though Baytrade.

PAST PROJECTS

- In-Situ PCB Remediation By Thermal Desorption at former Naval Shipyard Mare Island.
  Electric resistance heating applied to soil to destroy or remove volatile and semi-volatile compounds.

- On Site Metals Detection Using Energy Dispersive X-Ray Fluorescence at former Naval Shipyard Hunter's Point.
  Near real-time analysis of a wide range of metals contaminants with on-site equipment.

- Contaminant Removal by Soil Washing at former Naval Shipyard Hunter's Point.
  Physical and chemical processing to remove metals and hydrocarbons from soil.

- In-Situ Metals Remediation Using an Electrokinetic Process at former Naval Air Station Alameda.
  Introducing an electric field to move metal ions across the treatment cell, see below figure.

Electrokinetics Treatment Cell

CURRENT PROJECTS

Bioconversion Cell Under Construction

- Bioconversion of Petroleum Contaminated Soil with a Facultative Process, see above figure.
  Aerobic and anaerobic bacterial system to breakdown hydrocarbon compounds.

- Multilevel Well Monitoring System Using a Single Borehole.
  One piece well to sample 7 different aquifers from a single borehole.

- Lead Paint Abatement Using an Ice Blast Process
  Removing lead paint from wood structures with ice particles.